

**UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION**

COMMSCOPE TECHNOLOGIES LLC)	
)	
Plaintiff,)	No. 3:16-cv-477
Counterclaim Defendant)	
)	Jury Trial Demanded
v.)	
)	
DALI WIRELESS, INC.)	
Defendant.)	
Counterclaim Plaintiff)	
v.)	
)	
COMMSCOPE CONNECTIVITY LLC)	
Counterclaim Defendant)	
)	

COMMSCOPE’S PROPOSED JURY INSTRUCTIONS

Pursuant to the Court’s February 1, 2019 Third Amended Patent Scheduling Order, CommScope Technologies, LLC and CommScope Connectivity LLC (collectively, “CommScope”) hereby submits the following proposed jury instructions, filed herewith as Tab A. CommScope reserves the right to amend, supplement, or otherwise modify these proposed jury instructions in light of Orders and/or instructions from the Court and as the case proceeds to trial and the parties continue to meet and confer regarding the nature and scope of trial.

CommScope also reserves the right to provide additional argument and/or authority in support of its proposed instructions, and to object to any instructions proposed by Defendant Dali Wireless, Inc. Further, through these proposed instructions, CommScope does not waive any objections or arguments related to any issues subject to pending or anticipated motions, including *Daubert* motions, motions for summary judgment, and motions *in limine*.

In accordance with the Court's Third Amended Patent Scheduling Order, CommScope has relied, to the extent possible, on Fifth Circuit pattern instructions, and has supplemented and/or amended those instructions where necessary based on other pattern instructions and relevant case law, principally, the Federal Circuit Bar Association's Model Patent Jury Instructions. Where CommScope cites to a model instruction, it also incorporates by reference the authority cited in the relevant model instruction.

Dated: May 7, 2019

/s/Philip P. Caspers

Philip P. Caspers (*pro hac vice*)
Samuel A. Hamer (*pro hac vice*)
William F. Bullard (*pro hac vice*)
Nathan D. Louwagie (*pro hac vice*)
CARLSON, CASPERS, VANDENBURGH
& LINDQUIST PA
225 South Sixth Street, Suite 4200
Minneapolis, Minnesota 55402
pcaspers@carlsoncaspers.com
shamer@carlsoncaspers.com
wbullard@carlsoncaspers.com
nlouwagie@carlsoncaspers.com
(612) 436-9600 Telephone
(612) 436-9605 Facsimile

Daniel J. Sheehan
State Bar No. 18174500
DANIEL J. SHEEHAN PLLC
Campbell Centre II, Suite 100
8150 N. Central Expressway
Dallas, Texas 75206
(214) 468-8899 Telephone
(214) 468-8803 Facsimile
dsheehan@dsa-law.com

Certificate of Service

I, the undersigned, certify that, on May 7, 2019, I caused the foregoing document to be served on all counsel of record via ECF.

s/ Philip P. Caspers

Philip P. Caspers (*pro hac vice*)

Samuel A. Hamer (*pro hac vice*)

William F. Bullard (*pro hac vice*)

Nathan D. Louwagie (*pro hac vice*)

CARLSON, CASPERS, VANDENBURGH
& LINDQUIST PA

225 South Sixth Street, Suite 4200

Minneapolis, Minnesota 55402

pcaspers@carlsoncaspers.com

shamer@carlsoncaspers.com

wbullard@carlsoncaspers.com

nlouwagie@carlsoncaspers.com

(612) 436-9600 Telephone

(612) 436-9605 Facsimile

TAB A – COMMSCOPE PROPOSED JURY INSTRUCTIONS

A. PRELIMINARY INSTRUCTIONS

1. Instructions for Beginning of Trial¹

Members of the jury panel, if you have a cell phone, PDA, Blackberry, smart phone, iPhone or any other wireless communication device with you, please take it out now and turn it off. Do not turn it to vibrate or silent; power it down. During jury selection, you must leave it off.

There are certain rules you must follow while participating in this trial.

First, you may not communicate with anyone about the case, including your fellow jurors, until it is time to deliberate. I understand you may want to tell your family, close friends and other people that you have been called for jury service so that you can explain when you are required to be in court. You should warn them not to ask you about this case, tell you anything they know or think they know about it, or discuss this case in your presence, until after I accept your verdict or excuse you as a juror.

Similarly, you must not give any information to anyone by any means about this case. For example, do not talk face-to-face or use any electronic device or media, such as the telephone, a cell or smart phone, camera, recording device, Blackberry, PDA, computer, the Internet, any Internet service, any text or instant messaging service, any Internet chat room, blog, or website such as Facebook, MySpace, YouTube, or Twitter, or any other way to communicate to anyone any information about this case until I accept your verdict or until you have been

¹ Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 1.1 Instructions for Beginning of Trial (2016).

excused as a juror. This includes any information about the parties, witnesses, participants, claims, evidence, or anything else related to this case.

Second, do not speak with anyone in or around the courthouse other than your fellow jurors or court personnel. Some of the people you encounter may have some connection to the case. If you were to speak with them, that could create an appearance or raise a suspicion of impropriety.

Third, do not do any research—on the Internet, in libraries, in books, newspapers, magazines, or using any other source or method. Do not make any investigation about this case on your own. Do not visit or view any place discussed in this case and do not use Internet programs or other devices to search for or view any place discussed in the testimony. Do not in any way research any information about this case, the law, or the people involved, including the parties, the witnesses, the lawyers, or the judge, until after you have been excused as jurors. If you happen to see or hear anything touching on this case in the media, turn away and report it to me as soon as possible.

These rules protect the parties' right to have this case decided only on evidence they know about, that has been presented here in court. If you do any research, investigation or experiment that we do not know about, or gain any information through improper communications, then your verdict may be influenced by inaccurate, incomplete or misleading information that has not been tested by the trial process, which includes the oath to tell the truth and cross-examination. It could also be unfair to the parties' right to know what information the jurors are relying on to decide the case. Each of the parties is entitled to a fair trial by an impartial jury, and you must conduct yourself so as to maintain the integrity of the trial process. If you decide the case based on information not presented in court, you will have denied the

parties a fair trial in accordance with the rules of this country and you will have done an injustice. It is very important that you abide by these rules. Failure to follow these instructions could result in the case having to be retried.

2. Preliminary Instructions to Jury²

MEMBERS OF THE JURY:

You have now been sworn as the jury to try this case. As the judge, I will decide all questions of law and procedure. As the jury, you are the judges of the facts. At the end of the trial, I will instruct you on the rules of law that you must apply to the facts as you find them.

You may take notes during the trial. Do not allow your note-taking to distract you from listening to the testimony. Your notes are an aid to your memory. If your memory should later be different from your notes, you should rely on your memory. Do not be unduly influenced by the notes of other jurors. A juror's notes are not entitled to any greater weight than each juror's recollection of the testimony.

Until this trial is over, do not discuss this case with anyone and do not permit anyone to discuss this case in your presence. This includes your spouse, children, relatives, friends, coworkers, and people with whom you commute to court each day. During your jury service, you must not communicate any information about this case by any means, by conversation or with the tools of technology. For example, do not talk face-to-face or use any electronic device or media, such as the telephone, a cell or smart phone, camera, recording device, Black- berry, PDA, computer, the Internet, any Internet service, any text or instant messaging service, any Internet chat room, blog, or website such as Facebook, MySpace, YouTube, or Twitter, or any

² Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 1.2 Preliminary Instructions to Jury (2016).

other way to communicate to anyone any information about this case until I accept your verdict or excuse you as a juror.

Do not even discuss the case with the other jurors until the end of the case when you retire to deliberate. It is unfair to discuss the case before all of the evidence is in, because you may become an advocate for one side or the other. The parties, the witnesses, the attorneys, and persons associated with the case are not allowed to communicate with you. And you may not speak with anyone else in or around the courthouse other than your fellow jurors or court personnel.

Do not make any independent investigation of this case. You must rely solely on what you see and hear in this courtroom. Do not try to learn anything about the case from any other source. In particular, you may not use any electronic device or media, such as a telephone, cell phone, smartphone, or computer to research any issue touching on this case. Do not go online or read any newspaper account of this trial or listen to any radio or television newscast about it. Do not visit or view any place discussed in this case and do not use Internet programs or other devices to search for or to view any place discussed in the testimony. In sum, you may not research any information about this case, the law, or the people involved, including the parties, the witnesses, the lawyers, or the judge, until after you have been excused as jurors.

There are some issues of law or procedure that I must decide that the attorneys and I must discuss. These issues are not part of what you must decide and they are not properly discussed in your presence. To avoid having you leave the courtroom and to save time, I may discuss these issues with the attorneys at the bench, out of your hearing. When I confer with the attorneys at the bench, please do not listen to what we are discussing. If the discussions require more time, I

may have you leave the courtroom until the lawyers and I resolve the issues. I will try to keep these interruptions as few and as brief as possible.

The trial will now begin. Lawyers for each side will make an opening statement. Opening statements are intended to assist you in understanding the significance of the evidence that will be presented. The opening statements are not evidence.

After the opening statements, the plaintiff will present its case through witness testimony and documentary or other evidence. Next, the defendant will have an opportunity to present its case. The plaintiff may then present rebuttal evidence.³ After all the evidence is introduced, I will instruct you on the law that applies to this case. The lawyers will then make closing arguments. Closing arguments are not evidence, but rather the attorneys' interpretations of what the evidence has shown or not shown. Finally, you will go into the jury room to deliberate to reach a verdict.

Keep an open mind during the entire trial. Do not decide the case until you have heard all of the evidence, my instructions, and the closing arguments.

It is now time for the opening statements.

³ CommScope believes the ordering of the introduction of evidence makes the most sense to decide on after the Court has issued its order on the parties' summary judgment motions.

3. What a Patent Is and How One Is Obtained⁴

This case involves a dispute relating to a United States patent. Before summarizing the positions of the parties and the issues involved in the dispute, let me take a moment to explain what a patent is and how one is obtained.

Patents are granted by the United States Patent and Trademark Office (sometimes called “the PTO”). A valid United States patent gives the patent holder the right for up to 20 years from the date the patent application was filed to prevent others from making, using, offering to sell, or selling the patented invention within the United States, or from importing it into the United States, without the patent holder’s permission. A violation of the patent holder’s rights is called infringement. The patent holder may try to enforce a patent against persons believed to be infringers by a lawsuit filed in federal court.

The process of obtaining a patent is called patent prosecution. To obtain a patent, one must first file an application with the PTO. The PTO is an agency of the Federal Government and employs trained Examiners who review applications for patents. The application includes what is called a “specification,” which contains a written description of the claimed invention telling what the invention is, how it works, how to make it, and how to use it. The specification concludes with one or more numbered sentences. These are the patent “claims.” When the patent is eventually granted by the PTO, the claims define the boundaries of its protection and give notice to the public of those boundaries.

After the applicant files the application, an Examiner reviews the application to determine whether or not the claims are patentable (appropriate for patent protection) and whether or not the specification adequately describes the invention claimed. In examining a

⁴ The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at A.1.

patent application, the Examiner reviews certain information about the state of the technology at the time the application was filed. The PTO searches for and reviews information that is publicly available or that is submitted by the applicant. This information is called “prior art.” The Examiner reviews this prior art to determine whether or not the invention is truly an advance over the state of the art at the time. Prior art is defined by law, and I will give you, at a later time during these instructions, specific instructions as to what constitutes prior art. However, in general, prior art includes information that demonstrates the state of technology that existed before the claimed invention was made or before the application was filed. A patent lists the prior art that the Examiner considered; this list is called the “cited references.”

After the prior art search and examination of the application, the Examiner informs the applicant in writing of what the Examiner has found and whether the Examiner considers any claim to be patentable and, thus, would be “allowed.” This writing from the Examiner is called an “Office Action.” If the Examiner rejects the claims, the applicant has an opportunity to respond to the Examiner to try to persuade the Examiner to allow the claims, and to change the claims or to submit new claims. This process may go back and forth for some time until the Examiner is satisfied that the application meets the requirements for a patent and the application issues as a patent, or that the application should be rejected and no patent should issue. Sometimes, patents are issued after appeals within the PTO or to a court. The papers generated during these communications between the Examiner and the applicant are called the “prosecution history.”

The fact that the PTO grants a patent does not necessarily mean that any invention claimed in the patent, in fact, deserves the protection of a patent. For example, the PTO may not have had available to it all other prior art that will be presented to you. A person accused of

infringement has the right to argue here in federal court that a claimed invention in the patent is invalid because it does not meet the requirements for a patent. It is your job to consider the evidence presented by the parties and determine independently whether or not the alleged infringer has proven that the patent is invalid.

4. Summary of Contentions⁵

To help you follow the evidence, I will now give you a summary of the positions of the parties.

The parties in this case are CommScope Technologies LLC, CommScope Connectivity LLC, which I will refer to collectively as “CommScope” unless I think it is important to distinguish between these entities for the purpose of a specific instruction, and Dali Wireless, Inc., which I will refer to as “Dali.” You must decide the case as to CommScope Technologies LLC and CommScope Connectivity LLC separately regardless of whether I refer to them collectively as “CommScope” or individually. The case involves five United States patents owned by CommScope Technologies LLC and two United States patents owned by Dali.

The Plaintiff CommScope Technologies LLC filed this lawsuit against Dali, seeking money damages from Dali for allegedly infringing United States Patent Nos. 7,639,982, 7,848,747, 8,326,218, 8,577,286, and 9,332,402 by making, importing, using, selling and/or offering for sale the products that CommScope Technologies LLC argues are covered by one or more claims of these patents. Patents are often referred to by their last three digits, so CommScope Technologies LLC’s patents may be referred to in shorthand as the ’982, ’747, ’218, ’286, and ’402 patents. The ’982, ’218, ’286, and the ’402 patents all came from the same

⁵ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at A.2-3; *see also Apple v. Samsung*, No. 5:12-cv-00630 (N.D. Cal. Mar. 29, 2014) (Dkt. No. 1543).

patent application. Therefore, they may be discussed collectively as the “’402 patent family.”

CommScope Technologies LLC contends that Dali’s infringement has been willful.

Dali denies that it has infringed the asserted claims of the ’982, ’747, ’218, ’286, and ’402 patents and argues that, in addition, the asserted claims are invalid. Invalidity is a defense to infringement.

Dali has brought counter-claims against CommScope for patent infringement. Dali seeks money damages from CommScope for allegedly infringing U.S. Patent Nos. 9,531,473 and 9,031,521 by making, importing, using, selling and/or offering for sale certain products that Dali argues are covered by one or more claims of these patents. As I said before, patents are often referred to by their last three digits, so Dali’s patents may be referred to in shorthand as the ’473 patent and the ’521 patent.

CommScope denies that it has infringed the claims asserted by Dali and argues that, in addition, the asserted claims are invalid. As I mentioned before, invalidity is a defense to infringement.

The parties have stipulated that CommScope’s FlexWave Prism and ION-E use the CommScope patents that CommScope is accusing Dali of infringing. Specifically, the parties have stipulated that CommScope’s FlexWave Prism and ION-E products practice each asserted claim of CommScope’s ’218, ’982, ’286, and ’402 patents. The parties have also stipulated that CommScope's Flex Wave Prism practices and/or is a commercial embodiment of each asserted claim of CommScope’s ’747 patent.

In this case, Dali does not contend that it sells any products that use the patents that it is accusing CommScope of infringing: either the ’473 patent or the ’521 patent.

For each party's patent infringement claims against the other, the first issue you will be asked to decide is whether the alleged infringer has infringed the claims of the patent holder's patents. You will also be asked to decide whether those patents are valid. If you decide that any claim of either party's patents has been infringed and is not invalid, you will then need to decide any money damages to be awarded to the patent holder to compensate it for the infringement. You will also need to make a finding as to whether infringement was willful. If you decide that any infringement was willful, that decision should not affect any damage award you give. I will take willfulness into account later.

Before you decide whether either party has infringed the other's patents, or whether the patents are invalid, you will need to understand the patent claims. As I mentioned, the patent claims are numbered sentences at the end of the patent that describe the boundaries of the patent's protection. It is my job as judge to explain to you the meaning of any language in the claims that needs interpretation.

I have already determined the meaning of certain terms of the claims of some of the patents at issue. You have been given a document reflecting those meanings. For a claim term for which I have not provided you with a definition, you should apply the ordinary meaning. You will be asked to apply my definitions of these terms in this case. However, my interpretation of the language of the claims should not be taken as an indication that I have a view regarding issues such as infringement and invalidity. Those issues are yours to decide. I will provide you with more detailed instructions on the meaning of the claims before you retire to deliberate your verdict.

5. Overview of Applicable Law⁶

In deciding the issues I just discussed, you will be asked to consider specific legal standards. I will give you an overview of those standards now and will review them in more detail before the case is submitted to you for your verdict.

The first issue you will be asked to decide is whether the asserted claims of the patents at issue have been infringed. Infringement is assessed on a claim-by-claim basis. Therefore, there may be infringement as to one claim but not infringement as to another. There are a few different ways that a patent may be infringed. I will explain the requirements for each of these types of infringement to you in detail at the conclusion of the case. In general, however, an alleged infringer may infringe a patent by making, using, selling, or offering for sale in the United States, or by importing into the United States, a product or by using a method meeting all the requirements of a claim of the patent. An alleged infringer may also indirectly infringe a patent by contributing to infringement by another entity, or by inducing another person or entity to infringe.

Another issue you will be asked to decide is whether the patent claims at issue are invalid. A patent claim may be invalid for a number of reasons, including because it claims subject matter that is not new or is obvious. For a claim to be invalid because it is not new, an alleged infringer must show, by clear and convincing evidence, that all of the elements of a claim are present in a single previous device or method, or sufficiently described in a single previous printed publication or patent. We call these “prior art.” If a claim is not new, it is said to be anticipated.

⁶ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at A.4.

Another way that a claim may be invalid is that it may have been obvious. Even though every element of a claim is not shown or sufficiently described in a single piece of “prior art,” the claim may still be invalid if it would have been obvious to a person of ordinary skill in the field of technology of the patent at the relevant time. You will need to consider a number of questions in deciding whether the invention(s) claimed in the patents at issue in this case are obvious. I will provide you detailed instructions on these questions at the conclusion of the case.

A patent may also be invalid if its description in the specification does not meet certain requirements. To be valid, a patent must meet the “written description” requirement. In order to meet this written description requirement, the description of the invention in the specification portion of the patent must be detailed enough to demonstrate that the applicant actually possessed the invention as broadly as claimed in the claims of the issued patent.

If you decide that any claim of the patents at issue have been infringed and are not invalid, you will then need to decide any money damages to be awarded to the relevant patent holder to compensate it for the infringement. A damages award should put the relevant patent holder in approximately the same financial position that it would have been in had the infringement not occurred, but in no event may the damages award be less than what the relevant patent holder would have received had it been paid a reasonable royalty. I will instruct you later on the meaning of a reasonable royalty. The damages you award are meant to compensate the relevant patent holder and not to punish the alleged infringer. You may not include in your award any additional amount as a fine or penalty, above what is necessary to compensate the relevant patent holder for the infringement, in order to punish the alleged infringer. I will give you more detailed instructions on the calculation of damages at the conclusion of the case.

6. Evidence⁷

The evidence you are to consider consists of the testimony of the witnesses, the documents and other exhibits admitted into evidence, and any fair inferences and reasonable conclusions you can draw from the facts and circumstances that have been proven.

From time to time, the Parties may offer into evidence documents that have been partially “redacted,” which means that certain contents of the documents have been blacked or whited out. Redactions are necessary for a variety of reasons, including that the redacted information includes legal advice that is privileged and may be unrelated to this case. You may give the unredacted information in any document whatever weight you choose, but you should not give any weight to the fact that the document is redacted or to any statements by any witness or attorney about the fact or existence of a redaction in any document.

7. Stipulations of Fact⁸

A “stipulation” is an agreement. When there is no dispute about certain facts, the attorneys may agree or “stipulate” to those facts. You must accept a stipulated fact as evidence and treat that fact as having been proven here in court. You have been given a document listing the stipulated facts. You should treat these facts as having been proven in court.

8. Witnesses⁹

⁷ Adapted from the Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 3.3 Evidence (2016); adapted from *Oracle USA, Inc. v. SAP AG*, No. 4:07-cv-01658, Dkt. No. 982 (N.D. Cal. November 10, 2010).

⁸ Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 2.3 Stipulations of Fact (2016).

⁹ Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 3.4 Witnesses (2016).

You alone are to determine the questions of credibility or truthfulness of the witnesses. In weighing the testimony of the witnesses, you may consider the witness's manner and demeanor on the witness stand, any feelings or interest in the case, or any prejudice or bias about the case, that he or she may have, and the consistency or inconsistency of his or her testimony considered in the light of the circumstances. Has the witness been contradicted by other credible evidence? Has he or she made statements at other times and places contrary to those made here on the witness stand? You must give the testimony of each witness the credibility that you think it deserves.

Even though a witness may be a party to the action and therefore interested in its outcome, the testimony may be accepted if it is not contradicted by direct evidence or by any inference that may be drawn from the evidence, if you believe the testimony.

You are not to decide this case by counting the number of witnesses who have testified on the opposing sides. Witness testimony is weighed; witnesses are not counted. The test is not the relative number of witnesses, but the relative convincing force of the evidence. The testimony of a single witness is sufficient to prove any fact, even if a greater number of witnesses testified to the contrary, if after considering all of the other evidence, you believe that witness.

9. Expert Witnesses¹⁰

When knowledge of technical subject matter may be helpful to the jury, a person who has special training or experience in that technical field is permitted to state his or her opinion on those technical matters. However, you are not required to accept that opinion. As with any other witness, it is up to you to decide whether to rely on it.

¹⁰ Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 3.5 Expert Witnesses (2016).

10. Deposition Testimony¹¹

Certain testimony may be presented to you through a deposition. A deposition is the sworn, recorded answers to questions a witness was asked in advance of the trial. Under some circumstances, if a witness cannot be present to testify from the witness stand, that witness's testimony may be presented, under oath, in the form of a deposition. Some time before this trial, attorneys representing the parties in this case questioned this witness under oath. A court reporter was present and recorded the testimony. The questions and answers will be shown to you during this trial. This deposition testimony is entitled to the same consideration and is to be judged by you as to credibility and weighed and otherwise considered by you in the same way as if the witness had been present and had testified from the witness stand in court.

11. Outline of Trial¹²

The trial will now begin. First, each side may make an opening statement. An opening statement is not evidence. It is simply an opportunity for the lawyers to explain what they expect the evidence will show.

There are two standards of proof that you will apply to the evidence, depending on the issue you are deciding. On some issues, you must decide whether certain facts have been proven by a preponderance of the evidence. A preponderance of the evidence means that the fact that is to be proven is more likely true than not, i.e., that the evidence in favor of that fact being true is sufficient to tip the scale, even if slightly, in its favor. On other issues that I will identify for you, you must use a higher standard and decide whether the fact has been proven by clear and

¹¹ Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 2.13 Deposition Testimony (2016).

¹² Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at A.5.

convincing evidence, i.e., that you have been left with a clear conviction that the fact has been proven.

These standards are different from what you may have heard about in criminal proceedings where a fact must be proven beyond a reasonable doubt. On a scale of these various standards of proof, as you move from preponderance of the evidence, where the proof need only be sufficient to tip the scale in favor of the party proving the fact, to beyond a reasonable doubt, where the fact must be proven to a very high degree of certainty, you may think of clear and convincing evidence as being between the two standards.

After the opening statements, the plaintiff will present its case through witness testimony and documentary or other evidence. Next, the defendant will have an opportunity to present its case. The plaintiff may then present rebuttal evidence.¹³ After the evidence has been presented, the attorneys will make closing arguments and I will give you final instructions on the law that applies to the case. These closing arguments by the attorneys are not evidence. After the closing arguments and instructions, you will then decide the case.

B. INSTRUCTIONS AT THE CLOSE OF EVIDENCE

1. Jury Charge¹⁴

MEMBERS OF THE JURY:

It is my duty and responsibility to instruct you on the law you are to apply in this case. The law contained in these instructions is the only law you may follow. It is your duty to follow

¹³ CommScope believes the ordering of the introduction of evidence should be decided after the Court has issued its order on the parties' summary judgment motions.

¹⁴ Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 3.1 Jury Charge (2016).

what I instruct you the law is, regardless of any opinion that you might have as to what the law ought to be.

If I have given you the impression during the trial that I favor either party, you must disregard that impression. If I have given you the impression during the trial that I have an opinion about the facts of this case, you must disregard that impression. You are the sole judges of the facts of this case. Other than my instructions to you on the law, you should disregard anything I may have said or done during the trial in arriving at your verdict.

You should consider all of the instructions about the law as a whole and regard each instruction in light of the others, without isolating a particular statement or paragraph.

The testimony of the witnesses and other exhibits introduced by the parties constitute the evidence. The statements of counsel are not evidence; they are only arguments. It is important for you to distinguish between the arguments of counsel and the evidence on which those arguments rest. What the lawyers say or do is not evidence. You may, however, consider their arguments in light of the evidence that has been admitted and determine whether the evidence admitted in this trial supports the arguments. You must determine the facts from all the testimony that you have heard and the other evidence submitted. You are the judges of the facts, but in finding those facts, you must apply the law as I instruct you.

You are required by law to decide the case in a fair, impartial, and unbiased manner, based entirely on the law and on the evidence presented to you in the courtroom. You may not be influenced by passion, prejudice, or sympathy you might have for the plaintiff or the defendant in arriving at your verdict.

2. Corporate Party Involved¹⁵

Do not let bias, prejudice or sympathy play any part in your deliberations. A corporation and all other persons are equal before the law and must be treated as equals in a court of justice.

3. Evidence¹⁶

The evidence you are to consider consists of the testimony of the witnesses, the documents and other exhibits admitted into evidence, and any fair inferences and reasonable conclusions you can draw from the facts and circumstances that have been proven.

From time to time, the Parties may offer into evidence documents that have been partially “redacted,” which means that certain contents of the documents have been blacked or whited out. Redactions are necessary for a variety of reasons, including that the redacted information includes legal advice that is privileged and may be unrelated to this case. You may give the unredacted information in any document whatever weight you choose, but you should not give any weight to the fact that the document is redacted or to any statements by any witness or attorney about the fact or existence of a redaction in any document.

4. Charts and Summaries¹⁷

Certain charts and summaries have been shown to you solely to help explain or summarize the facts disclosed by the books, records, and other documents that are in evidence.

¹⁵ Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 2.16 Bias—Corporate Party Involved (2016).

¹⁶ Adapted from the Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 3.3 Evidence (2016); adapted from *Oracle USA, Inc. v. SAP AG*, No. 4:07-cv-01658, Dkt. No. 982 (N.D. Cal. November 10, 2010).

¹⁷ Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 2.7 Charts and Summaries (2016).

These charts and summaries are not evidence or proof of any facts. You should determine the facts from the evidence.

5. Demonstrative Evidence¹⁸

Some exhibits have been presented to you as illustrations. Demonstrative evidence can be used to describe something involved in this trial. If your recollection of the evidence differs from the exhibit, rely on your recollection.

6. Witnesses¹⁹

You alone are to determine the questions of credibility or truthfulness of the witnesses. In weighing the testimony of the witnesses, you may consider the witness's manner and demeanor on the witness stand, any feelings or interest in the case, or any prejudice or bias about the case, that he or she may have, and the consistency or inconsistency of his or her testimony considered in the light of the circumstances. Has the witness been contradicted by other credible evidence? Has he or she made statements at other times and places contrary to those made here on the witness stand? You must give the testimony of each witness the credibility that you think it deserves.

Even though a witness may be a party to the action and therefore interested in its outcome, the testimony may be accepted if it is not contradicted by direct evidence or by any inference that may be drawn from the evidence, if you believe the testimony.

¹⁸ Adapted from Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 2.8 Demonstrative Evidence (2016).

¹⁹ Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 3.4 Witnesses (2016).

You are not to decide this case by counting the number of witnesses who have testified on the opposing sides. Witness testimony is weighed; witnesses are not counted. The test is not the relative number of witnesses, but the relative convincing force of the evidence. The testimony of a single witness is sufficient to prove any fact, even if a greater number of witnesses testified to the contrary, if after considering all of the other evidence, you believe that witness.

7. Expert Witnesses²⁰

When knowledge of technical subject matter may be helpful to the jury, a person who has special training or experience in that technical field is permitted to state his or her opinion on those technical matters. However, you are not required to accept that opinion. As with any other witness, it is up to you to decide whether to rely on it.

8. Deposition Testimony²¹

Certain testimony has been presented to you through a deposition. A deposition is the sworn, recorded answers to questions a witness was asked in advance of the trial. Under some circumstances, if a witness cannot be present to testify from the witness stand, that witness's testimony may be presented, under oath, in the form of a deposition. Some time before this trial, attorneys representing the parties in this case questioned this witness under oath. A court reporter was present and recorded the testimony. This deposition testimony is entitled to the same consideration and is to be judged by you as to credibility and weighed and otherwise

²⁰ Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 3.5 Expert Witnesses (2016).

²¹ Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 2.13 Deposition Testimony (2016).

considered by you in the same way as if the witness had been present and had testified from the witness stand in court.

9. Impeachment by Witness's Inconsistent Statements²²

In determining the weight to give to the testimony of a witness, consider whether there was evidence that at some other time the witness said or did something, or failed to say or do something, that was different from the testimony given at the trial.

A simple mistake by a witness does not necessarily mean that the witness did not tell the truth as he or she remembers it. People may forget some things or remember other things inaccurately. If a witness made a misstatement, consider whether that misstatement was an intentional falsehood or simply an innocent mistake. The significance of that may depend on whether it has to do with an important fact or with only an unimportant detail.

10. No Inference from Filing Suit²³

The fact that a person brought a lawsuit or that a defendant asserted a counterclaim and is in court seeking damages creates no inference that the person is entitled to a judgment. Anyone may make a claim and file a lawsuit and any defendant can assert a counterclaim. The act of making a claim or counterclaim in a lawsuit, by itself, does not in any way tend to establish that claim and is not evidence.

11. Stipulations of Fact²⁴

²² Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 2.11 Impeachment by Witness's Inconsistent Statements (2016).

²³ Adapted from the Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 3.6 No Inference from Filing Suit (2016).

²⁴ Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 2.3 Stipulations of Fact (2016).

A “stipulation” is an agreement. When there is no dispute about certain facts, the attorneys may agree or “stipulate” to those facts. You must accept a stipulated fact as evidence and treat that fact as having been proven here in court. You have been given a document listing the stipulated facts. You should treat these facts as having been proven in court.

12. Summary of Contentions²⁵

As I did at the start of the case, I will first give you a summary of each side’s contentions in this case. I will then provide you with detailed instructions on what each side must prove to win on each of its contentions.

Plaintiff Commscope Technologies LLC filed this lawsuit against Dali, seeking money damages from Dali for allegedly infringing United States Patent Nos. 7,639,982, 7,848,747, 8,326,218, 8,577,286, and 9,332,402 by making, importing, using, selling and/or offering for sale the products that CommScope Technologies LLC argues are covered by one or more claims of these patents. Patents are often referred to by their last three digits, so CommScope Technologies LLC’s patents may be referred to in shorthand as the ’982, ’747, ’218, ’286, and ’402 patents. CommScope Technologies LLC contends that Dali’s infringement has been willful.

Dali denies that it has infringed the asserted claims of the ’982, ’747, ’218, ’286, and ’402 patents and argues that, in addition, the asserted claims are invalid. Invalidity is a defense to infringement.

Dali has also brought counter-claims against CommScope for patent infringement. Dali seeks money damages from CommScope for allegedly infringing U.S. Patent Nos. 9,531,473 and 9,031,521 by making, importing, using, selling and/or offering for sale certain products that Dali

²⁵ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.1.

argues are covered by one or more claims of these patents. As I said before, patents are often referred to by their last three digits, so Dali's patents may be referred to in shorthand as the '473 patent and the '521 patent.

CommScope denies that it has infringed the claims asserted by Dali and argues that, in addition, the asserted claims are invalid. As I mentioned before, invalidity is a defense to infringement.

The parties have stipulated that CommScope's FlexWave Prism and ION-E use the CommScope patents that CommScope is accusing Dali of infringing. Specifically, the parties have stipulated that CommScope's FlexWave Prism and ION-E products practice each asserted claim of CommScope's '218, '982, '286, and '402 patents. The parties have also stipulated that CommScope's Flex Wave Prism practices and/or is a commercial embodiment of each asserted claim of CommScope's '747 patent.

In this case, Dali does not contend that it sells any products that use the patents that it is accusing CommScope of infringing: either the '473 patent or the '521 patent.

For each party's patent infringement claims against the other, the first issue you will be asked to decide is whether the alleged infringer has infringed the claims of the patent holder's patents. You will also be asked to decide whether those patents are valid. If you decide that any claim of either party's patents has been infringed and is not invalid, you will then need to decide any money damages to be awarded to the patent holder to compensate it for the infringement. You will also need to make a finding as to whether infringement was willful. If you decide that any infringement was willful, that decision should not affect any damage award you give. I will take willfulness into account later.

Before you decide whether either party has infringed the other's patents, or whether the patents are invalid, you will need to understand the patent claims. As I mentioned, the patent claims are numbered sentences at the end of the patent that describe the boundaries of the patent's protection. It is my job as judge to explain to you the meaning of any language in the claims that needs interpretation.

I have already determined the meaning of certain terms of the claims of some of the patents at issue. You have been given a document reflecting those meanings. For a claim term for which I have not provided you with a definition, you should apply the ordinary meaning. You will be asked to apply my definitions of these terms in this case. However, my interpretation of the language of the claims should not be taken as an indication that I have a view regarding issues such as infringement and invalidity. Those issues are yours to decide. I will provide you with more detailed instructions on the meaning of the claims before you retire to deliberate your verdict.

13. The Role of the Claims of a Patent²⁶

Before you can decide many of the issues in this case, you will need to understand the role of patent "claims." The patent claims are the numbered sentences at the end of each patent. The claims are important because it is the words of the claims that define what a patent covers. The figures and text in the rest of the patent provide a description and/or examples of the invention and provide a context for the claims, but it is the claims that define the breadth of the patent's coverage. Each claim is effectively treated as if it were a separate patent, and each claim may cover more or less than another claim. Therefore, what a patent covers depends, in turn, on what each of its claims covers.

²⁶ The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.2.1.

You will first need to understand what each claim covers in order to decide whether or not there is infringement of the claim and to decide whether or not the claim is invalid. The law says that it is my role to define the terms of the claims and it is your role to apply my definitions to the issues that you are asked to decide in this case. Therefore, as I explained to you at the start of the case, I have determined the meaning of the claims and I will provide to you my definitions of certain claim terms. You must accept my definitions of these words in the claims as being correct. It is your job to take these definitions and apply them to the issues that you are deciding, including the issues of infringement and validity.

14. How a Claim Defines what it Covers²⁷

I will now explain how a claim defines what it covers.

A claim sets forth, in words, a set of requirements. Each claim sets forth its requirements in a single sentence. If a device or a method satisfies each of these requirements, then it is covered by the claim.

There can be several claims in a patent. Each claim may be narrower or broader than another claim by setting forth more or fewer requirements. The coverage of a patent is assessed claim-by-claim. In patent law, the requirements of a claim are often referred to as “claim elements” or “claim limitations.” When a thing (such as a product or a process) meets all of the requirements of a claim, the claim is said to “cover” that thing, and that thing is said to “fall” within the scope of that claim. In other words, a claim covers a product or process where each of the claim elements or limitations is present in that product or process.

²⁷ The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.2.2.

Sometimes the words in a patent claim are difficult to understand, and therefore it is difficult to understand what requirements these words impose. It is my job to explain to you the meaning of the words in the claims and the requirements these words impose.

As I just instructed you, there are certain specific terms that I have defined and you are to apply the definitions that I provide to you.

By understanding the meaning of the words in a claim and by understanding that the words in a claim set forth the requirements that a product or process must meet in order to be covered by that claim, you will be able to understand the scope of coverage for each claim. Once you understand what each claim covers, then you are prepared to decide the issues that you will be asked to decide, such as infringement and invalidity.

15. Independent and Dependent Claims²⁸

This case involves two types of patent claims: independent claims and dependent claims.

An “independent claim” sets forth all of the requirements that must be met in order to be covered by that claim. Thus, it is not necessary to look at any other claim to determine what an independent claim covers.

The remainder of the claims are “dependent claims.” A dependent claim does not itself recite all of the requirements of the claim but refers to another claim for some of its requirements. In this way, the claim “depends” on another claim. A dependent claim incorporates all of the requirements of the claim(s) to which it refers. The dependent claim then adds its own additional requirements. To determine what a dependent claim covers, it is necessary to look at both the dependent claim and any other claim(s) to which it refers. A

²⁸ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.2.2a.

product or process that meets all of the requirements of both the dependent claim and the claim(s) to which it refers is covered by that dependent claim.

16. Claim Interpretation²⁹

As I have previously instructed you, you must accept my definition of these words in the claims as correct. I have already determined the meaning of certain terms of the claims of some of the patents at issue. You have been given a document reflecting those meanings. As I have previously instructed you, you must accept my definition of these words in the claims as correct. For any words in the claim for which I have not provided you with a definition, you should apply their common meaning. You should not take my definition of the language of the claims as an indication that I have a view regarding how you should decide the issues that you are being asked to decide, such as infringement and invalidity. These issues are yours to decide.

17. Infringement Generally³⁰

I will now instruct you how to decide whether or not an alleged infringer has infringed a patent. Infringement is assessed on a claim-by-claim basis. Therefore, there may be infringement as to one claim but no infringement as to another.

In this case, there are three possible ways that a claim may be infringed. The three types of infringement are called: (1) direct infringement; (2) active inducement; and (3) contributory infringement. Active inducement and contributory infringement are referred to as indirect infringement. There cannot be indirect infringement without someone else engaging in direct

²⁹ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.2.3.

³⁰ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.3.1.

infringement. To prove indirect infringement, a patent holder must also prove that an alleged infringer's indirect infringement caused direct infringement.

In this case, CommScope has alleged that Dali infringes claims 1, 3, 5, 12, and 25 of the '218 patent directly and indirectly by inducement and contributory infringement. CommScope alleges these claims are infringed literally and under the doctrine of equivalents.

CommScope has also alleged that Dali infringes claims 1, 8, 10, 23, 27, and 30 of the '286 patent directly and indirectly by inducement and contributory infringement. CommScope alleges these claims are infringed literally and under the doctrine of equivalents.

CommScope has also alleged that Dali infringes claims 1, 3, 14, 18, 31, 33, and 42 of the '402 patent directly and indirectly by inducement and contributory infringement. CommScope alleges these claims are infringed literally and under the doctrine of equivalents.

CommScope has also alleged that Dali infringes claims 1 and 8 of the '982 patent, directly and indirectly by inducement and contributory infringement.

CommScope has also alleged that Dali infringes claims 7, 8, and 10 of the '747 patent directly and indirectly by inducement and contributory infringement. CommScope alleges these claims are infringed literally and under the doctrine of equivalents.

Dali contends that CommScope has directly infringed and continues to infringe claims 1 and 2 of the '521 patent via literal infringement, by making, using, selling, or offering to sell its FlexWave Prism product in the United States.

Dali also alleges that CommScope has directly infringed and continues to infringe Claims 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, and 21 of the '473 patent via literal infringement and under the doctrine of equivalence, by making, using, selling, or offering to sell its ION-E product in the United States.

In order to prove infringement, a patent holder must prove that the requirements for one or more of these types of infringement are met by a preponderance of the evidence, i.e., that it is more likely than not that all of the requirements of one or more of each of these types of infringement have been proved.

The existence of an alleged infringer's own patent does not constitute a defense to infringement of someone else's patent.³¹

I will now explain each of these types of infringement in more detail.

18. Direct Infringement by “Literal Infringement”³²

There are two types of “direct infringement”: (1) “literal infringement” and (2) “infringement under the doctrine of equivalents.” In order to prove direct infringement by literal infringement, a patent holder must prove by a preponderance of the evidence, i.e., that it is more likely than not, that an alleged infringer made, used, sold, offered for sale within, or imported into the United States a product or process that meets all of the requirements of a claim and did so without the permission of the patent holder during the time the patent was in force. You must compare the product or process with each and every one of the requirements of a claim to determine whether all of the requirements of that claim are met.

³¹ See, e.g., *Vaupel Textilmaschinen KG v. Meccanica Euro Italia S.P.A.*, 944 F.2d 870, 879 n.4 (Fed. Cir. 1991) (“[I]t is well-established that the existence of one's own patent does not constitute a defense to infringement of someone else's patent. It is elementary that a patent grants only the right to exclude others and confers no right on its holder to make, use, or sell.”).

³² Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.3.1a; 2018 AIPLA Model Patent Jury Instructions 3.1; see, e.g., *Vaupel Textilmaschinen KG v. Meccanica Euro Italia S.P.A.*, 944 F.2d 870, 879 n.4 (Fed. Cir. 1991) (“[I]t is well-established that the existence of one's own patent does not constitute a defense to infringement of someone else's patent. It is elementary that a patent grants only the right to exclude others and confers no right on its holder to make, use, or sell.”)

You must determine, separately for each asserted claim, whether or not there is infringement. There is one exception to this rule. If you find that a claim on which other claims depend is not infringed, there cannot be infringement of any dependent claim that refers directly or indirectly to that independent claim. On the other hand, if you find that an independent claim has been infringed, you must still decide, separately, whether the product or process meets additional requirements of any claims that depend from the independent claim, thus, whether those claims have also been infringed. A dependent claim includes all the requirements of any of the claims to which it refers plus additional requirements of its own.

A party can directly infringe a patent without knowing of the patent or without knowing that what the party is doing is patent infringement. The existence of an alleged infringer's own patent does not constitute a defense to infringement of someone else's patent.

19. Infringement of “Comprising of” Claims³³

The preamble to the claims of the patents in this case use the word “comprising”. The word “comprising” means “including the following but not excluding others.”

If you find that the accused product or method includes all of the elements in the claim, even if the accused product or method includes additional components or method steps, you must find that the accused product or method literally infringes the claim.

20. Direct Infringement Under the Doctrine of Equivalents³⁴

If a company makes, uses, sells, offers to sell within, or imports into the United States a product or process that does not meet all of the requirements of a claim and thus does not

³³ Adapted from the 2018 AIPLA Model Patent Jury Instructions 3.6.

³⁴ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.3.1c.

literally infringe that claim, there can still be direct infringement if that product or process satisfies that claim “under the doctrine of equivalents.”

Under the doctrine of equivalents, a product or process infringes a claim if the accused product or process contains elements or performs steps corresponding to each and every requirement of the claim that is equivalent to, even though not literally met by, the accused product or process. You may find that an element or step is equivalent to a requirement of a claim that is not met literally if a person having ordinary skill in the field of technology of the patent would have considered the differences between them to be “insubstantial” or would have found that the structure or action: (1) performs substantially the same function and (2) works in substantially the same way (3) to achieve substantially the same result as the requirement of the claim.

21. Indirect Infringement—Active Inducement³⁵

To find that an alleged infringer actively induced infringement, the patent owner must prove by a preponderance of the evidence that (1) a single actor is responsible for direct infringement, namely that all the components or method steps of the product or method accused of infringing the patent, and (2) the alleged infringer actively induced these acts of infringement by the single actor responsible for direct infringement.

To prove active inducement, the patent owner must establish that it is more likely than not that:

³⁵ Adapted from The 2018 AIPLA Model Patent Jury Instruction 3.8.

1. The alleged infringer aided, instructed, or otherwise acted with the intent to cause acts by the alleged direct infringer that would constitute direct infringement of the patent;
2. The alleged infringer knew of the patent, or showed willful blindness to the existence of the patent, at that time;
3. The alleged infringer knew, or showed willful blindness, that the actions of the alleged direct infringer would infringe at least one claim of the patent; and
4. The alleged direct infringer infringed at least one patent claim.

To find willful blindness (1) the alleged infringer must have subjectively believed that there was a high probability that a patent existed covering the accused product or method, and (2) the alleged infringer must have taken deliberate actions to avoid learning of the patent.

22. Indirect Infringement—Contributory Infringement³⁶

An allegation of indirect infringement can also arise when a patent holder argues that an alleged infringer is liable for contributory infringement by contributing to the direct infringement of the patent by a third person or company. As with direct infringement, you must determine contributory infringement on a claim-by-claim basis.

An alleged indirect infringer is liable for contributory infringement of a claim if the patent holder proves by a preponderance of the evidence:

- (1) the alleged indirect infringer sells, offers to sell, or imports within the United States a component of a product, or apparatus for use in a process, during the time the patent is in force;
- (2) the component or apparatus has no substantial, noninfringing use;

³⁶ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.3.3.

(3) the component or apparatus constitutes a material part of the invention;

(4) the alleged indirect infringer is aware of the patent and knows that the products or processes for which the component or apparatus has no other substantial use may be covered by a claim of the patent or may satisfy a claim of the patent under the doctrine of equivalents; and

(5) that use directly infringes the claim.

In order to prove contributory infringement, the patent holder must prove that each of the above requirements is met. This proof of each requirement must be by a preponderance of the evidence, i.e., that it is more likely than not that each of the above requirements is met.

23. Willful Infringement³⁷

If you find that it is more likely than not that a party infringed a valid claim of the other party's patent, either literally or under the doctrine of equivalents, then you must also determine whether or not the infringement was willful.

To show that the infringement was willful, the patent owner must prove by a preponderance of the evidence that the infringer knew of the patent owner's patent and intentionally infringed at least one asserted claim of the patent. For example, you may consider whether the infringer's behavior was malicious, wanton, deliberate, consciously wrongful, flagrant, or in bad faith. However, you may not find that the infringement was willful merely because the infringer knew about the patent, without more.

In determining whether the patent owner has proven that the infringement was willful, you must consider all circumstances and assess the infringer's knowledge at the time the challenged conduct occurred. Relevant circumstances may include, but are not limited, to:

³⁷ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.3.10 and the AIPLA Model Patent Jury Instructions.

(1) Whether or not the alleged infringer acted consistently with the standards of behavior for its industry;

(2) Whether or not the alleged infringer tried to cover up its infringement;

(3) Whether or not the alleged infringer reasonably believed it did not infringe or that the patent was invalid;

(4) Whether or not the alleged infringer made a good-faith effort to avoid infringing the patent, for example, whether the alleged infringer attempted to design around the patent; and

(5) Whether or not the alleged infringer intentionally copied a product of the patent holder that is covered by a patent.

If you determine that any infringement was willful, you may not allow that decision to affect the amount of any damages award you give for infringement.

24. Invalidity—Burden of Proof³⁸

I will now instruct you on the rules you must follow in deciding whether or not an alleged infringer has proven that claims of a patent are invalid. To prove that any claim of a patent is invalid, an alleged infringer must persuade you by clear and convincing evidence in order to overcome the presumption of validity, i.e., you must be left with a clear conviction that the claim is invalid.

As I mentioned before, you must accept my definition of the words in the claims as correct. For any words in the claim for which I have not provided you with a definition, you

³⁸ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.4.1; *01 Communique Lab., Inc. v. Citrix Sys.*, 889 F.3d 735, 743; [Amgen Inc. v. Hoechst Marion Roussel, Inc.](#), 314 F.3d 1313, 1330 (Fed. Cir. 2003); [Amazon.com, Inc. v. Barnesandnoble.com, Inc.](#), 239 F.3d 1343, 1351 (Fed. Cir. 2001); 2018 AIPLA Model Patent Jury Instructions pp. 4-5.

should apply their common meaning. Claim terms have the same meaning for both invalidity and infringement.

25. Prior Art³⁹

Prior art may include items that were publicly known or that have been used or offered for sale, or references, such as publications or patents, that disclose the claimed invention or elements of the claimed invention. To be prior art, the item or reference must have been made, known, used, published, or patented either before the invention was made or more than one year before the filing date of the patent application. However, prior art does not include a publication that describes the inventor's own work and was published less than one year before the date of invention. Prior art references are presumed to be enabling.

26. Person of Ordinary Skill in the Art⁴⁰

The question of invalidity of a patent claim is determined from the perspective of a person of ordinary skill in the art in the field of the claimed invention as of the time of the invention. Thus, prior art must be evaluated from the perspective of one of ordinary skill in the field of the invention as of the time of the invention.

In deciding what the level of ordinary skill in the field of the invention is, you should consider all the evidence introduced at trial, including but not limited to: (1) the levels of education and experience of the inventor and other persons actively working in the field; (2) the

³⁹ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.4.3a-1; *GE v. Mitsubishi Heavy Indus.*, 946 F. Supp. 2d 582, 615 (N.D. Tex. 2013) (“prior art references are presumed to be enabling” (citing *In re Antor Media Corp.*, 689 F.3d 1282, 1287-88 (Fed. Cir. 2012))).

⁴⁰ Adapted from the AIPLA Model Patent Jury Instructions 5.3 and The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.4.3c(i).

types of problems encountered in the field; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; and (5) the sophistication of the technology.

The person of ordinary skill is presumed to know all prior art that you have determined to be reasonably relevant. The person of ordinary skill is also a person of ordinary creativity that can use common sense to solve problems.

27. Anticipation⁴¹

In order for someone to be entitled to a patent, the invention must actually be “new” and the inventor must not have lost her or his rights by delaying the filing of an application claiming the invention. In general, inventions are new when the identical product or process has not been made, used, or disclosed before. Anticipation must be determined on a claim-by-claim basis.

In this case, each party contends that claim(s) of the other party’s patent(s) are invalid because the claimed invention(s) are anticipated or because the patent holder lost the right to obtain a patent. The alleged infringer must convince you of this by clear and convincing evidence in order to overcome the presumption of validity, i.e., that the evidence highly probably demonstrates that the claim(s) is/are invalid.

Here is a list of ways that an alleged infringer can show that a patent claim was not new or that the patentee lost the right to patent the claim(s):

(1) An invention is not new if it was known to or used by others in the United States before the date of the invention. An invention is known when the information about it was reasonably accessible to the public on that date.

⁴¹ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.4.3b-1; *see also* American Intellectual Property Law Association (AIPLA), *Model Patent Jury Instructions* (2018), at 25 (regarding inherency), 31 (regarding enablement); *Microsoft Corp. v. Parallel Networks Licensing, LLC*, 715 Fed. Appx. 1013, 1021 (Fed. Cir. 2017); 2018 AIPLA Model Patent Jury Instructions.

(2) An invention is not new if it was already patented or described in a printed publication, anywhere in the world before the date of the invention. A description is a “printed publication” only if it was publicly accessible.

(3) The patent holder has lost her or his rights if the claimed invention was already patented or described in a printed publication, anywhere in the world by the patent holder or anyone else, more than a year before the date the patent was filed. An invention was patented by another if the other patent describes the same invention claimed by the patent holder to a person having ordinary skill in the technology.

(4) An invention is not new if it was described in a published patent application filed by another in the United States or under the PCT system and designated the United States, and was published in English before the date of the invention.

(5) An invention is not new if the claimed invention was described in a patent granted on an application for patent by another filed in the United States or under the PCT system and designated the United States, and was published in English and the application was filed before [insert date of reduction to practice or the filing date of the application for the [] patent].

(6) An invention is not new if the invention was made by someone else in the United States before the invention was made by the patent holder and the other person did not abandon, suppress, or conceal the invention.

In determining whether the single item of prior art anticipates a patent claim, you should take into consideration not only what is expressly disclosed in the particular prior art reference but also what is inherently present or disclosed in that prior art or inherently results from its practice. Prior art inherently anticipates a patent claim if the missing element or feature would necessarily result from what the single item of prior art teaches to persons of ordinary skill in the

art. A party claiming inherent anticipation must prove that it is highly probable that the allegedly inherent element or feature necessarily is present. Evidence outside of the prior art reference itself may be used to show that elements that are not expressly disclosed in the reference are inherent in it. To be inherent, the feature that is alleged to have been inherent must necessarily have existed in the prior art reference. The fact that the feature is likely to have existed is not sufficient. It is not required, however, that persons of ordinary skill recognize or appreciate the inherent disclosure at the time the prior art was first known or used. Thus, the prior use of the patented invention that was unrecognized and unappreciated can still be an invalidating anticipation, provided the allegedly inherent feature was necessarily present in the reference.

For a patent or printed publication to anticipate a patent claim, the disclosure of the claimed invention must be complete enough to enable one of ordinary skill in the art to use the invention without undue experimentation. Patents and printed publications are presumed to be enabled. In determining whether the disclosure is enabling, you should consider what would have been within the knowledge of a person of ordinary skill in the art as of the date of the invention, and you may consider evidence that sheds light on the knowledge such a person would have had.

28. Obviousness⁴²

Even though an invention may not have been identically disclosed or described before it was made by an inventor, in order to be patentable, the invention must also not have been obvious to a person of ordinary skill in the field of technology of the patent at the time the invention was made.

⁴² Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.4.3c and American Intellectual Property Law Association (AIPLA), *Model Patent Jury Instructions* (2018) 7.0.

An alleged infringer may establish that a patent claim is invalid by showing, by clear and convincing evidence, that the claimed invention would have been obvious to persons having ordinary skill in the art at the time the invention was made in the relevant field.

In deciding obviousness, you must avoid using hindsight; that is, you should not consider what is known today or what was learned from the teachings of the patent. You should not use the patent as a road map for selecting and combining items of prior art. You must put yourself in the place of a person of ordinary skill in the art as of the date of the invention.

In determining whether a claimed invention is obvious, you must consider the level of ordinary skill in the field of the invention that someone would have had at the time the invention was made, the scope and content of the prior art, and any differences between the prior art and the claimed invention.

Keep in mind that the existence of each and every element of the claimed invention in the prior art does not necessarily prove obviousness. Most, if not all, inventions rely on building blocks of prior art. In considering whether a claimed invention is obvious, you may but are not required to find obviousness if you find that at the time of the claimed invention there was a reason that would have prompted a person having ordinary skill in the field of the invention to combine the known elements in a way the claimed invention does, taking into account such factors as (1) whether the claimed invention was merely the predictable result of using prior art elements according to their known function(s); (2) whether the claimed invention provides an obvious solution to a known problem in the relevant field; (3) whether the prior art teaches or suggests the desirability of combining elements claimed in the invention; (4) whether the prior art teaches away from combining elements in the claimed invention; (5) whether it would have been obvious to try the combinations of elements, such as when there is a design need or market

pressure to solve a problem and there are a finite number of identified, predictable solutions; and (6) whether the change resulted more from design incentives or other market forces. To find it rendered the invention obvious, you must find that the prior art provided a reasonable expectation of success. Obvious to try is not sufficient in unpredictable technologies.

In determining whether the claimed invention was obvious, consider each claim separately.

Before deciding the issue of obviousness for each claimed invention, you must also consider certain factors, which may help to determine whether the invention would have been obvious. No factor alone is dispositive, and you must consider the obviousness or non-obviousness of the invention as a whole. Certain of these factors include:

1. Were products covered by the claim commercially successful due to the merits of the claimed invention rather than due to advertising, promotion, salesmanship, or features of the product other than those found in the claim?
2. Was there long-felt need for a solution to the problems facing the inventors, which was satisfied by the claimed invention?
3. Did others try, but fail, to solve the problem solved by the claimed invention?
4. Did others copy the claimed invention?
5. Did the claimed invention achieve unexpectedly superior results over the closest prior art?
6. Did others in the field, or the alleged infringer, praise the claimed invention or express surprise at the making of the claimed invention?

7. Did others accept licenses under the patent because of the merits of the claimed invention?

Answering all, or some of these questions “yes” may suggest that the claim was not obvious.

These factors are relevant only if there is a connection, or nexus, between the factor and the invention covered by the patent claim. Even if you conclude that some of the above factors have been established, those factors should be considered along with all the other evidence in the case in determining whether the alleged infringer has proven that the claimed invention would have been obvious.

29. Scope and Content of the Prior Art⁴³

In considering whether the claimed invention was obvious at the time it was made, you should consider the scope and content of the prior art admitted at trial, including but not limited to:

- For Dali’s ’473 patent:
 - U.S. Patent No. 7,286,507 (“Oh”),
 - U.S. Patent App. Pub. No. 2009/0180426 (“Sabat”),
 - U.S. Patent App. Pub. No. 2010/0128676 (“Wu”),
 - U.S. Patent App. Pub. No. 2005/0157675 (“Feder”),
 - Network Design Basics for Cabling Professionals (2002) (“Network Design Basics”),
 - Telecommunications and Data Communications Handbook by Ray Horak, (2007) (“Telecommunications Handbook”),

⁴³ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.4.3c(ii).

- Ethernet, The Definitive Guide by Charles E. Spurgeon, (2000) (“Ethernet Guide”) , U.S. Patent No. 8,958,789 (“Bauman”),
 - the CPRI Standard v. 4.0, U.S. Patent No. 6,785,558 (“Stratford”),
 - U.S. Patent No. 8,346,091 (“Kummetz”), and
 - U.S. Patent No. 6,801,767 (“Schwartz 2”).
- For Dali’s ’521 patent:
 - U.S. Patent No. 5,959,499 (“Khan”),
 - U.S. Patent No. 5,740,520 (“Cyze”),
 - U.S. Patent App. Pub. No. 2003/0058959 (“Rafie”),
 - U.S. Patent App. Pub. No. 2003/0035494 (“Bauder”),
 - U.S. Patent App. Pub. No. 2002/0186783 (“Opas”),
 - U.S. Patent No. 6,973,139 (“Ahn”),
 - U.S. Patent 7,248,642 (“Vella-Coleiro”),
 - U.S. Patent No. 6,587,514 (“Wright”),
 - U.S. Patent 4,993,047 (“Moffatt”),
 - U.S. Patent 4,291,277 (“Davis”),
 - U.S. Patent No. 5,959,500 (“Garrido”),
 - U.S. Patent No. 6,236,267 (“Anzil”),
 - U.S. Patent No. 6,614,854 (“Chow”),
 - U.S. Patent No. 5,049,832 (“Cavers”),
 - U.S. Patent No. 6,240,144 (“Ha”),
 - U.S. Patent No. 6,373,902 (“Park”),
 - U.S. Patent No. 6,907,085 (“Kubo”),

- U.S. Patent No. 6,591,090 (“Vuorio”).
- For CommScope’s ’747 patent:
 - U.S. Patent No. 8,446,530 (“Bellers”),
 - “Synchronous Quantized Subcarrier Multiplexing for Transport of Video, Voice and Data” by Martin K. Grace, DALI-COMM001706-13 (“Grace”),
 - PCT Publication WO01/56197 A2 (“Farhan”) and
 - U.S. Patent No. 6,014,366 (“Ichiyoshi”).
- For CommScope’s ’402 patent family:
 - PCT Publication WO98/24253 (“Bexten”),
 - U.S. Patent No. 5,644,622 (“Russell”),
 - U.S. Patent No. 6,356,369 (“Farhan 369”),
 - U.S. Patent No. 5,748,683 (“Smith”), and
 - U.S. Patent No. 6,005,884 (“Cook”).

30. Written Description Requirement⁴⁴

The patent law contains certain requirements for the part of the patent called the specification. Sometimes, like in this case, an alleged infringer contends that claim(s) of a patent holder’s patent are invalid because the specification of the patent does not contain an adequate written description of the invention. To succeed, the alleged infringer must show by clear and convincing evidence that the specification fails to meet the law’s requirements for written description of the invention. In the patent application process, the applicant may keep the originally filed claims, or change the claims between the time the patent application is first filed

⁴⁴ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.4.2a.

and the time a patent is issued. An applicant may amend the claims or add new claims. These changes may narrow or broaden the scope of the claims. The written description requirement ensures that the issued claims correspond to the scope of the written description that was provided in the original application.

In deciding whether the patent satisfies this written description requirement, you must consider the description from the viewpoint of a person having ordinary skill in the field of technology of the patent when the application was filed. The written description requirement is satisfied if a person having ordinary skill reading the original patent application would have recognized that it describes the full scope of the claimed invention as it is finally claimed in the issued patent and that the inventor actually possessed that full scope by the filing date of the original application.

The written description requirement may be satisfied by any combination of the words, structures, figures, diagrams, formulas, etc., contained in the patent application. The full scope of a claim or any particular requirement in a claim need not be expressly disclosed in the original patent application if a person having ordinary skill in the field of technology of the patent at the time of filing would have understood that the full scope or missing requirement is in the written description in the patent application.

31. Enablement⁴⁵

The patent law contains further requirements for the part of the patent called the specification. Sometimes, like in this case, an alleged infringer contends that claim(s) of a patent holder's patent are invalid because the specification does not contain a sufficiently full and clear

⁴⁵ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.4.2b.

description of how to make and use the full scope of the claimed invention. To succeed, the alleged infringer must show by clear and convincing evidence that the patent does not contain a sufficiently full and clear description of the claimed invention. To be sufficiently full and clear, the description must contain enough information to have allowed a person having ordinary skill in the field of technology of the patent to make and use the full scope of the claimed invention at the time the original patent application was filed. This is known as the “enablement” requirement. If a patent claim is not enabled, it is invalid.

In order to be enabling, the patent must permit persons having ordinary skill in the field of technology of the patent to make and use the full scope of the claimed invention at the time of original filing without having to conduct undue experimentation. However, some amount of experimentation to make and use the invention is allowable. In deciding whether a person having ordinary skill would have to experiment unduly in order to make and use the invention, you may consider several factors:

- (1) the time and cost of any necessary experimentation;
- (2) how routine any necessary experimentation is in the relevant field;
- (3) whether the patent discloses specific working examples of the claimed invention;
- (4) the amount of guidance presented in the patent;
- (5) the nature and predictability of the relevant field of;
- (6) the level of ordinary skill in the relevant field; and
- (7) the scope of the claimed invention.

No one or more of these factors is alone dispositive. Rather, you must make your decision whether or not the degree of experimentation required is undue based upon all of the evidence presented to you. You should weigh these factors and determine whether or not, in the

context of this invention and the state of the art at the time of the original application, a person having ordinary skill would need to experiment unduly to make and use the full scope of the claimed invention.

32. Damages—Introduction⁴⁶

If you find that an alleged infringer infringed any valid claim of a patent, you must then consider what amount of damages to award to the patent holder. I will now instruct you about the measure of damages. By instructing you on damages, I am not suggesting which party should win this case, on any issue. If you find that an alleged infringer has not infringed any valid claim of the patent, then the patent holder is not entitled to any damages.

The damages you award must be adequate to compensate the patent holder for the infringement. They are not meant to punish an infringer. Your damages award, if you reach this issue, should put the patent holder in approximately the same financial position that it would have been in had the infringement not occurred.

The patent holder has the burden to establish the amount of its damages by a preponderance of the evidence. In other words, you should award only those damages that the patent holder establishes that it more likely than not suffered. While the patent holder is not required to prove the amount of its damages with mathematical precision, it must prove them with reasonable certainty. You may not award damages that are speculative, damages that are only possible, or damages that are based on guesswork.

There are different types of damages that a patent holder may be entitled to recover. In this case, both parties seek a reasonable royalty. A reasonable royalty is defined as the money

⁴⁶ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.6.1.

amount a patent holder and an alleged infringer would have agreed upon as a fee for use of the invention at the time prior to when infringement began. But, regardless of the type of damages you may choose to award, you must be careful to ensure that award is no more or no less than the value of the patented invention.

I will give more detailed instructions regarding damages shortly. Note, however, that a patent holder is entitled to recover no less than a reasonable royalty for each infringing act.

33. Reasonable Royalty—Definition⁴⁷

A royalty is a payment made to a patent holder in exchange for the right to make, use, or sell the claimed invention. A reasonable royalty is the amount of royalty payment that a patent holder and the alleged infringer would have agreed to in a hypothetical negotiation taking place at a time prior to when the infringement first began. In considering this hypothetical negotiation, you should focus on what the expectations of the patent holder and the alleged infringer would have been had they entered into an agreement at that time, and had they acted reasonably in their negotiations. In determining this, you must assume that both parties believed the patent was valid and infringed and that both parties were willing to enter into an agreement. The reasonable royalty you determine must be a royalty that would have resulted from the hypothetical negotiation, and not simply a royalty either party would have preferred. Evidence of things that happened after the infringement first began can be considered in evaluating the reasonable royalty only to the extent that the evidence aids in assessing what royalty would have resulted from a hypothetical negotiation. Although evidence of the actual profits an alleged infringer

⁴⁷ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.6.6.

made may be used to determine the anticipated profits at the time of the hypothetical negotiation, the royalty may not be limited or increased based on the actual profits the alleged infringer made.

34. Reasonable Royalty—Relevant Factors⁴⁸

In determining the reasonable royalty, you should consider all the facts known and available to the parties at the time the infringement began. Some of the kinds of factors that you may consider in making your determination are:

- (1) The value that the claimed invention contributes to the accused product.
- (2) The value that factors other than the claimed invention contribute to the accused product.
- (3) Comparable license agreements, such as those covering the use of the claimed invention or similar technology.

No one factor is dispositive and you can and should consider the evidence that has been presented to you in this case on each of these factors. You may also consider any other factors which in your mind would have increased or decreased the royalty the alleged infringer would have been willing to pay and the patent holder would have been willing to accept, acting as normally prudent business people. The factors that can be considered to inform the hypothetical negotiations, include the following:

- (1) The royalties received by the patentee for the licensing of the patent-in-suit, proving or tending to prove an established royalty;
- (2) The rates paid by the licensee for the use of other patents comparable to the patent-in-suit.

⁴⁸ Adapted from The Federal Circuit Bar Association, *Model Patent Jury Instructions* (July 2016), at B.6.7.

(3) The nature and scope of the license, as exclusive or nonexclusive, or as restricted or nonrestricted in terms of territory or with respect to whom the manufactured product may be sold.

(4) The licensor's established policy and marketing program to maintain his or her patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.

(5) The commercial relationship between the licensor and licensee, such as whether they are competitors in the same territory in the same line of business, or whether they are inventor and promoter.

(6) The effect of selling the patented specialty in promoting sales of other products of the licensee, the existing value of the invention to the licensor as a generator of sales of his nonpatented items, and the extent of such derivative or convoyed sales.

(7) The duration of the patent and the term of the license.

(8) The established profitability of the product made under the patents, its commercial success, and its current popularity.

(9) The utility and advantages of the patented property over the old modes or devices, if any, that had been used for working out similar results.

(10) The nature of the patented invention, the character of the commercial embodiment of it as owned and produced by the licensor, and the benefits to those who have used the invention.

(11) The extent to which the infringer has made use of the invention and any evidence probative of the value of that use.

(12) The portion of the profit or of the selling price that may be customary in the particular business or in comparable business to allow for the use of the invention or analogous inventions.

(13) The portion of the realizable profits that should be credited to the invention as distinguished from nonpatented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.

(14) The opinion and testimony of qualified experts.

(15) The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee—who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.

35. Reasonable Royalty—Use of Comparable License Agreements⁴⁹

When determining a reasonable royalty, you may consider evidence concerning the amounts that other parties have paid for rights to the patents in question, or for rights to similar technologies. A license agreement need not be perfectly comparable to a hypothetical license that would be negotiated between the patent owner and the alleged infringer in order for you to consider it. However, if you choose to rely upon evidence from any other license agreements, you must account for any differences between those licenses and the hypothetically negotiated license between the patent owner and the alleged infringer, in terms of the technologies and

⁴⁹ Adapted from 2018 AIPLA Model Patent Jury Instructions 10.2.5.9.

economic circumstances of the contracting parties, when you make your reasonable royalty determination.

36. Duty to Deliberate; Notes⁵⁰

It is now your duty to deliberate and to consult with one another in an effort to reach a verdict. Each of you must decide the case for yourself, but only after an impartial consideration of the evidence with your fellow jurors. During your deliberations, do not hesitate to reexamine your own opinions and change your mind if you are convinced that you were wrong. But do not give up on your honest beliefs because the other jurors think differently, or just to finish the case.

Remember at all times, you are the judges of the facts. You have been allowed to take notes during this trial. Any notes that you took during this trial are only aids to memory. If your memory differs from your notes, you should rely on your memory and not on the notes. The notes are not evidence. If you did not take notes, rely on your independent recollection of the evidence and do not be unduly influenced by the notes of other jurors. Notes are not entitled to greater weight than the recollection or impression of each juror about the testimony.

When you go into the jury room to deliberate, you may take with you a copy of this charge, the exhibits that I have admitted into evidence, and your notes. You must select a jury foreperson to guide you in your deliberations and to speak for you here in the courtroom.

Your verdict must be unanimous. After you have reached a unanimous verdict, your jury foreperson must fill out the answers to the written questions on the verdict form and sign and date it. After you have concluded your service and I have discharged the jury, you are not required to talk with anyone about the case.

⁵⁰ Committee on Pattern Jury Instructions, District Judges Association—Fifth Circuit, *Pattern Jury Instructions (Civil Cases)*, at § 3.7 Duty to Deliberate; Notes (2016).

If you need to communicate with me during your deliberations, the jury foreperson should write the inquiry and give it to the court security officer. After consulting with the attorneys, I will respond either in writing or by meeting with you in the courtroom. Keep in mind, however, that you must never disclose to anyone, not even to me, your numerical division on any question.

You may now proceed to the jury room to begin your deliberations.

C. GLOSSARY

Some of the terms in this glossary will be defined in more detail in the legal instructions you are given. The definitions in the instructions must be followed and must control your deliberations.

Abstract: A brief summary of the technical disclosure in a patent to enable the U.S. Patent and Trademark Office and the public to determine quickly the nature and gist of the technical disclosure in the patent.

Amendment: A patent applicant's change to one or more claims or to the specification either in response to an office action taken by an Examiner or independently by the patent applicant during the patent application examination process.

Anticipation: A situation in which a claimed invention describes an earlier invention and, therefore, is not considered new and is not entitled to be patented.

Assignment: A transfer of patent rights to another called an "assignee" who, upon transfer, becomes the owner of the rights assigned.

Claim: Each claim of a patent is a concise, formal definition of an invention and appears at the end of the specification in a separately numbered paragraph. In concept, a patent claim marks the boundaries of the patent in the same way that a legal description in a deed specifies the

boundaries of land, i.e., similar to a landowner who can prevent others from trespassing on the bounded property, the inventor can prevent others from using what is claimed. Claims may be independent or dependent. An independent claim stands alone. A dependent claim does not stand alone and refers to one or more other claims. A dependent claim incorporates whatever the other referenced claim or claims say.

Conception: The complete mental part of the inventive act which must be capable of proof, as by drawings, disclosure to another, etc.

Drawings: The drawings are visual representations of the claimed invention contained in a patent application and issued patent, and usually include several figures illustrating various aspects of the claimed invention.

Elements: The required parts of a device or the required steps of a method. A device or method infringes a patent if it contains each and every requirement of a patent claim.

Embodiment: A product or method that contains the claimed invention.

Enablement: A description of the invention that is sufficient to enable persons skilled in the field of the invention to make and use the invention. The specification of the patent must contain such an enabling description.

Examination: Procedure before the U.S. Patent and Trademark Office whereby an Examiner reviews the filed patent application to determine if the claimed invention is patentable.

Filing Date: Date a patent application, with all the required sections, has been submitted to the U.S. Patent and Trademark Office.

Infringement: Violation of a patent occurring when someone makes, uses, or sells a patented invention, without permission of the patent holder, within the United States during the term of the patent. Infringement may be direct, by inducement, or contributory. Direct

infringement is making, using, or selling the patented invention without permission. Inducing infringement is intentionally causing another to directly infringe a patent. Contributory infringement is offering to sell or selling an item that is a significant part of the invention, so that the buyer directly infringes the patent. To be a contributory infringer, one must know that the part being offered or sold is designed specifically for infringing the patented invention and is not a common object suitable for noninfringing uses.

Limitation: A required part of an invention set forth in a patent claim. A limitation is a requirement of the invention. The word “limitation” is often used interchangeably with the word “requirement.”

Nonobviousness: One of the requirements for securing a patent. To be valid, the subject matter of the invention must not have been obvious to a person of ordinary skill in the field at the time of the earlier of the filing date of the patent application or the date of invention.

Office Action: A written communication from the Examiner to the patent applicant in the course of the application examination process.

Patent: A patent is an exclusive right granted by the U.S. Patent and Trademark Office to an inventor to prevent others from making, using, or selling an invention for a term of 20 years from the date the patent application was filed (or 17 years from the date the patent issued).

When the patent expires, the right to make, use, or sell the invention is dedicated to the public.

The patent has three parts, which are a specification, drawings and claims. The patent is granted after examination by the U.S. Patent and Trademark Office of a patent application filed by the inventor which has these parts, and this examination is called the prosecution history.

Patent and Trademark Office (PTO): An administrative branch of the U.S. Department of Commerce that is charged with overseeing and implementing the federal laws of patents and

trademarks. It is responsible for examining all patent applications and issuing all patents in the United States.

Prior Art: Previously known subject matter in the field of a claimed invention for which a patent is being sought. It includes issued patents, publications, and knowledge deemed to be publicly available, such as trade skills, trade practices, and the like.

Prosecution History: The prosecution history is the complete written record of the proceedings in the PTO from the initial application to the issued patent. The prosecution history includes the office actions taken by the PTO and the amendments to the patent application filed by the applicant during the examination process.

Reads On: A patent claim “reads on” a device or method when each required part (requirement) of the claim is found in the device or method.

Reduction to Practice: The invention is “reduced to practice” when it is sufficiently developed to show that it would work for its intended purpose.

Requirement: A required part or step of an invention set forth in a patent claim. The word “requirement” is often used interchangeably with the word “limitation.”

Royalty: A royalty is a payment made to the owner of a patent by a nonowner in exchange for rights to make, use, or sell the claimed invention.

Specification: The specification is a required part of a patent application and an issued patent. It is a written description of the invention and of the manner and process of making and using the claimed invention.

Attachment A

Claim Constructions

The meaning of several claim terms are provided below. You should apply these meanings in your infringement and validity determinations. If a claim term does not appear in the list below, you should apply its ordinary meaning.

U.S. Patent No. 7,639,982

Claim Term	Meaning	Relevant Claims
“ <u>shared circuitry</u> that performs bidirectional, <u>simultaneous</u> ... distribution...”	<p>“shared circuitry” refers to circuitry used to support multiple remote units.</p> <p>“simultaneous” means that upstream shared circuitry is used for multiple remote units at the same time that downstream shared circuitry is used for multiple remote units.</p> <p>The claim does not require the same circuit components to be used for both upstream and downstream signals at the same time.</p>	Claim 1 of the ‘982 patent.

U.S. Patent Nos. 9,332,402; 8,577,286; 8,326,218; and 7,639,982

Claim Term	Meaning	Relevant Claims
“digital RF samples” “digital samples” “digitized...signals”	There is no requirement in these claims that the samples must be expressed in “real” form.	All claims of the ‘982, ‘286, ‘218, and ‘402 patents.
“radio frequency spectrum” “radio frequency signals”	The claims are not limited to systems that operate on only one spectrum or band.	All claims of the ‘982, ‘286, ‘218, and ‘402 patents.

U.S. Patent No. 7,848,747

Claim Term	Meaning	Relevant Claims
“analog to digital converter circuit(s)”	Circuit that accomplishes at least the conversion of an analog input signal to a digital output signal.	Claim 7 of the ‘747 patent.
“multiplexer circuit”	Circuit that accomplishes at least the simultaneous transmission of two or more signals over a common transmission medium.	Claims 7, 10 of the ‘747 patent.
“broadband RF signal”	Wideband RF signal.	Claim 7 of the ‘747 patent.

U.S. Patent No. 9,031,521

Claim Term	Meaning	Relevant Claims
“switching a controller off to disconnect signal representative of the output of the power amplifier”	Switching a controller to a nonoperating state to disconnect signal representative of the output of the power amplifier.	Claim 1 of the ‘521 patent.
“initializing the power amplifier”	Placing the power amplifier in a condition for operation.	Claim 1 of the ‘521 patent.
“the lookup table”	“the lookup table” in the “retrieving . . .” step refers to the same lookup table introduced in the “storing . . .” step.	Claim 1 of the ‘521 patent.
“the power amplifier”	“the power amplifier” always refers to the same power amplifier that is introduced in the preamble	Claim 1 of the ‘521 patent.

U.S. Patent No. 9,531,473

Claim Term	Meaning	Relevant Claims
“the host unit is capable of sending...any downlink signal it receives to any of the plurality of remote units”	<p>a) This requires the remote units to be able to selectively forward subsets of radio resources to the next remote unit along a daisy-chain of remote units. It is insufficient for the first remote unit in a daisy-chain simply to forward every signal it receives to another downstream remote unit in the daisy-chain.</p> <p>b) This limitation also requires that the host must have the capability to extract and individually direct individual radio resources to individual remote units.</p> <p>c) This limitation does not cover systems in which the transmission paths remain fixed until a switch is changed.</p>	All claims 6 through 21 of the ‘473 patent.
“packetizing...”	Making units of data to be sent over a network which must include destination information such as within a packet header.	Claims 9, 10, 14-17 of the ‘473 patent.